

CLAIMS

What is claimed is:

- 1 1. A system for controlling real-time transport protocol flow, comprising:
 - 2 a plurality of computers that are connected to a first computer, wherein each of said
 - 3 plurality of computers comprise;
 - 4 a transceiver;
 - 5 software stored within said plurality of computers defining functions to be
 - 6 performed by said plurality of computers; and
 - 7 a processor configured by said software to perform the steps of,
 - 8 performing an inbound screen on route information received by said
 - 9 plurality of computers, from said first computer, to determine if said received route information
 - 10 should be discarded,
 - 11 if said route information is not discarded, comparing said received and
 - 12 screened route information to a local policy defined within said plurality of computers; and
 - 13 a database on which said local policy is stored, wherein said local policy is used by each
 - 14 of said associated computers within said cluster of computers.

- 1 2. The system of claim 1, wherein a single address is used for all of said plurality of
- 2 computers.

- 1 3. The system of claim 1, wherein said received route information is provided within
- 2 a telephony routing over Internet protocol (TRIP) update message.

1 4. The system of claim 1, wherein said database also stores internal route
2 information and route information from said received and screened route information.

1 5. The system of claim 4, wherein said processor is further configured by said
2 software to perform the step of, selecting a primary route from a group of routes comprising said
3 internal route information and said received and screened route information.

1 6. The system of claim 5, wherein said processor is further configured by said
2 software to perform the step of, processing a received session initiation protocol (SIP) invite
3 message that is received on said primary route.

1 7. The system of claim 5, wherein said processor is further configured by said
2 software to perform the step of, performing an outbound screen on said received and screened
3 information prior to transmitting said received and screened information outside said cluster of
4 computers, wherein said outbound screen is performed on said primary route prior to said
5 transceiver transmitting said primary route to said first computer.

1 8. The system of claim 1, wherein said local policy comprises an activate date and
2 time field that defines a date and time for said local policy to be enabled by said second
3 processor.

1 9. The system of claim 1, wherein said local policy comprises a de-activate date and
2 time field that defines a date and time for said local policy to be disabled by said second
3 processor.

1 10. The system of claim 1, wherein said local policy comprises an origin field.

1 11. The system of claim 10, wherein said processor is further configured by said
2 software to perform the step of, comparing said origin field within said local policy to an origin
3 attribute within said received route information, if said received route information comprises said
4 origin attribute, and utilizing said local policy if said origin attribute at least partially matches
5 said origin field.

1 12. The system of claim 3, wherein said processor is further configured by said
2 software to perform the step of, utilizing said local policy if said TRIP update message does not
3 comprise an origin attribute.

1 13. The system of claim 11, wherein the format of said origin attribute and said origin
2 field conforms to E.164 style addresses, Internet style addresses, and, SIP telephone addresses or
3 non-SIP telephone addresses.

1 14. The system of claim 1, wherein said local policy comprises a destination field.

1 15. The system of claim 14, wherein said processor is further configured by said
2 software to perform the step of, comparing said destination field within said local policy to a
3 destination attribute within said received route information, if said received route information
4 comprises said destination attribute, and utilizing said local policy if said destination attribute at
5 least partially matches said destination field.

1 16. The system of claim 15, wherein the format of said destination attribute and said
2 destination field conforms to E.164 style addresses, Internet style addresses, SIP telephone
3 addresses, or non-SIP telephone addresses.

1 17. The system of claim 1, wherein said local policy comprises a carrier field that
2 identifies a number of carriers from which said route information will be accepted by said
3 plurality of computers.

1 18. The system of claim 17, wherein said processor is further configured by said
2 software to perform the step of, discarding said received route information if a carrier attribute
3 comprised by said received route information does not match at least one carrier identified by
4 said carrier field.

1 19. The system of claim 1, wherein said local policy comprises a cost field that
2 identifies an acceptable range of cost to be billed for use of a route.

1 20. The system of claim 19, wherein said processor is further configured by said
2 software to perform the step of, discarding said received route information if a cost attribute
3 comprised by said received route information does not fall within said acceptable range of cost
4 identified by said cost field.

1 21. The system of claim 1, wherein said local policy comprises a quality of service
2 (QoS) field that identifies an acceptable range of QoS associated with use of a route.

1 22. The system of claim 21, wherein said processor is further configured by said
2 software to perform the step of, discarding said received route information if a QoS attribute
3 within said received route information does not fall within said acceptable range of QoS cost
4 identified by said QoS field.

1 23. A method of controlling real-time transport protocol flow, comprising the steps
2 of:

3 receiving information regarding a route from a first computer to a plurality of computers;
4 performing an inbound screen on said received route information to determine if said
5 received route information should be discarded; and
6 if said received route information is not discarded, comparing said received and screened
7 route information to a local policy that is used by the computers within plurality of computers.

1 24. The method of claim 23, wherein said route is for ranges conformed to E.164
2 style numbering, Internet style addresses of endpoints, SIP telephone addresses, or non-SIP
3 telephone addresses.

1 25. The method of claim 23, further comprising the step of selecting a primary route
2 from a group of routes comprising, information regarding an internal route that is associated with
3 said local policy, and said received and screened route information.

1 26. The method of claim 25, further comprising the step of processing a received
2 session initiation protocol (SIP) invite message that is received on said primary route.

1 27. The method of claim 25, further comprising the step of performing an outbound
2 screen on said received and screened information prior to transmitting said received and screened
3 information outside said plurality of computers, wherein said outbound screening is performed
4 on said primary route prior to transmitting said primary route.

1 28. The method of claim 23, further comprising the step of enabling said local policy
2 on a specified date and at a specified time in accordance with an activate date and time field
3 defined by said local policy.

1 29. The method of claim 23, further comprising the step of disabling said local policy
2 on a specified date and at a specified time in accordance with a de-activate date and time field
3 defined by said local policy.

1 30. The method of claim 23, wherein said local policy comprises an origin field.

1 31. The method of claim 30, further comprising the step of comparing said origin
2 field within said local policy to an origin attribute within said received route information, if said
3 received route information comprises said origin attribute, and utilizing said local policy if said
4 origin attribute at least partially matches said origin field.

1 32. The method of claim 31, wherein the format of said origin attribute and said
2 origin field conforms to E.164 style addresses, Internet style addresses, SIP telephone addresses,
3 or non-SIP telephone addresses.

1 33. The method of claim 23, wherein said route information is provided within a
2 telephony routing over Internet protocol (TRIP) update message.

1 34. The method of claim 23, wherein said local policy comprises a destination field.

1 35. The method of claim 34, further comprising the step of comparing said
2 destination field within said local policy to a destination attribute comprised by said received
3 route information, if said received route information comprises said destination attribute, and
4 utilizing said local policy if said destination attribute at least partially matches said destination
5 field.

1 36. The method of claim 31, wherein the format of said destination attribute and said
2 destination field conforms to E.164 style addresses, Internet style addresses, SIP telephone
3 addresses, or non-SIP telephone addresses.

1 37. The method of claim 23, wherein said local policy comprises a carrier field that
2 identifies a number of carriers from which said route information will be accepted.

1 38. The method of claim 37, further comprising the step of discarding said received
2 route information if a carrier attribute within said received route information does not match at
3 least one carrier identified by said carrier field.

1 39. The method of claim 23, wherein said local policy comprises a cost field that
2 identifies an acceptable range of cost to be billed for use of a route.

1 40. The method of claim 39, further comprising the step of discarding said received
2 route information if a cost attribute with said received route information does not fall within said
3 acceptable range of cost identified by said cost field.

1 41. The method of claim 23, wherein said local policy comprises a quality of service
2 (QoS) field that identifies an acceptable range of QoS associated with use of a route.

1 42. The system of claim 41, further comprising the step of discarding said received
2 route information if a QoS attribute comprised by said received route information does not fall
3 within said acceptable range of QoS cost identified by said QoS field.

1 43. A system for controlling real-time transport protocol flow through multiple
2 networks, comprising:

3 means for receiving information regarding a route from a first computer to a plurality of
4 computers;

5 means for performing an inbound screen on said received route information configured to
6 determine if said received route information should be discarded; and

7 means for comparing said received and screened route information to a local policy that
8 is used by the plurality of computers if said route information is not discarded.

1 44. The system of claim 43, wherein said route is for ranges conformed to E.164 style
2 numbering, Internet style addresses of endpoints, SIP telephone addresses, and non-SIP
3 telephone addresses.

1 45. The system of claim 43, further comprising a means for selecting a primary route
2 from a group of routes comprising, information regarding an internal route that is associated with
3 said local policy, and said received and screened route information.

1 46. The system of claim 45, further comprising a means for processing a received
2 session initiation protocol (SIP) invite message that is received on said primary route.

1 47. The system of claim 45, further comprising a means for performing an outbound
2 screen on said received and screened information, configured to perform said outbound screen
3 prior to transmitting said received and screened information outside of said plurality of

4 computers, and wherein said means for performing said outbound screen performs outbound
5 screening on said primary route prior to transmitting said primary route outside of said plurality
6 of computers.

1 48. The system of claim 43, further comprising a means for enabling said local policy
2 on a specified date and at a specified time in accordance with an activate date and time field
3 defined by said local policy.

1 49. The system of claim 43, further comprising a means for disabling said local policy
2 on a specified date and at a specified time in accordance with a de-activate date and time field
3 defined by said local policy.

1 50. The system of claim 43, wherein said local policy comprises an origin field.

1 51. The system of claim 50, further comprising a means for comparing said origin
2 field within said local policy to an origin attribute within said received route information if said
3 received route information comprises said origin attribute, and which utilizes said local policy if
4 said origin attribute at least partially matches said origin field.

1 52. The system of claim 51, wherein the format of said origin attribute and said origin
2 field conforms to E.164 style addresses, Internet style addresses, SIP telephone addresses, or
3 non-SIP telephone addresses.

1 53. The system of claim 43, wherein said route information is provided within a
2 telephony routing over Internet protocol (TRIP) update message.

1 54. The system of claim 43, wherein said local policy comprises a destination field.

1 55. The system of claim 54, further comprising a means for comparing said
2 destination field within said local policy to a destination attribute within said received route
3 information if said received route information comprises said destination attribute, and which
4 utilizes said local policy if said destination attribute at least partially matches said destination
5 field.

1 56. The system of claim 51, wherein the format of said destination attribute and said
2 destination field conforms to E.164 style addresses, Internet style addresses, SIP telephone
3 addresses, or non-SIP telephone addresses.

1 57. The system of claim 53, wherein said local policy comprises a carrier field that
2 identifies a number of carriers from which said route information will be accepted.

1 58. The system of claim 57, further comprising a means for discarding said received
2 route information if a carrier attribute with said received route information does not match at
3 least one carrier identified by said carrier field.

1 59. The system of claim 43, wherein said local policy comprises a cost field that
2 identifies an acceptable range of cost to be billed for use of a route.

1 60. The system of claim 59, further comprising a means for discarding said received
2 route information if a cost attribute comprised by said received route information does not fall
3 within said acceptable range of cost identified by said cost field.

1 61. The system of claim 43, wherein said local policy comprises a quality of service
2 (QoS) field that identifies an acceptable range of QoS associated with use of a route.

1 62. The system of claim 61, further comprising a means for discarding said received
2 route information if a QoS attribute comprised by said received route information does not fall
3 within said acceptable range of QoS cost identified by said QoS field.